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EXAMINER

JEAN GILLES, JUDE

ART UNIT

PAPER NUMBER

2143

NOTIFICATION DATE

DELIVERY MODE

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ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/806,431

**Applicant(s)**

GUTJAHR, BERND

**Examiner**

JUDE J. JEAN GILLES

**Art Unit**

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8500)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 03/23/2004 and 05/21/2004

### DETAILED ACTION

The Office Action is responsive to communication filed on 03/23/2004.

#### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 03/23/2004, and 05/21/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

#### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claim 20 and 21 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

**Regarding claim 20:** claim 20 recites the steps of *"A propagated signal carried on an electromagnetic waveform comprising a representation of program code for carrying out a method, when executed on a computer system, of mapping status messages of monitored objects to service elements in an IT-infrastructure-management system, the service elements and their dependencies being represented by an element graph having directed links between service elements, thereby defining higher-level and lower-level service elements, the program code being arranged to:..."* These steps fail to definitely recite a hardware executing the computer software, rendering the claim as recited only an abstract idea. The claim equates merely to a computer code or concept per se since "A propagated signal" in

the context of the claimed invention is interpreted by the Examiner to represent software signal, which does not have a practical application or tangible result.

**Regarding claim 21:** Claim 21 is also nonstatutory for the same reason as claim 20 above.

Appropriate correction is required. The above noticed problems are just exemplary. Applicant is required to totally check the application for error and correct the same.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Wesby U.S. Pub. No. US 20050222933 A1.

Regarding claims 1-21, Wesby teaches:

1. A method of mapping status messages of monitored objects to service elements in an IT-infrastructure-management system (figs. 1 and 2; see item 400 relating to the IT mobile telecommunications infrastructure), the service elements and their dependencies being represented by an element graph having directed links between service elements,

thereby defining higher-level and lower-level service elements (par. 0145; 0202), the method comprising:

directing a status message to at least one higher-level service element (the operational data for the elements of par. 0040 are considered for example high level service elements: environmental data);

ascertaining, at the higher-level service element, whether the status message pertains to a lower-level service element connected with the higher-level service element (the modules of par. 0036, the operational data contain low level service elements with characteristics related to the high service elements or operational data);

downwardly propagating of the status message to said lower-level service element in response to a positive outcome in said ascertaining (par. 0074).

2. The method of claim 1, wherein, before the status message is directed to the at least one higher-level service element, the status message is analyzed, and attributes are added to the status message related to information contained in the status message, wherein said ascertaining is performed on the basis of the attributes associated with the status message (par. 0107).

3. The method of claim 1, wherein at least some of the service elements are logical service elements (par. 0040).

4. The method of claim 1, wherein an edge condition is associated with a link

connecting the at least one higher-level service element with a lower-level service element, and wherein the edge condition is tested in said ascertaining (fig. 1).

5. The method of claim 1, wherein a node condition is associated with the at least one higher-level service element, and wherein the node condition is tested in said ascertaining (par. 0039).

6. The method of claim 1, wherein lower-level service elements are arranged in more than one hierarchical level, and wherein the actions of ascertaining and downwardly propagating are repeatedly carried out downwardly from level to level (par. 0074).

7. The method of claim 6, wherein, in said ascertaining, for a service element on a higher hierarchical-level, at least one condition is tested for each service element on a lower hierarchical-level connected with the service element on the higher hierarchical-level, and wherein the downward propagation of the status message is terminated if no condition for propagating the status message to a service element on the lower hierarchical-level is fulfilled (par. 0107).

8. The method of claim 1, wherein the element graph is able to be extended by adding further service elements without a necessity to adapt the status messages of the monitored objects to the service elements added (par. 0145; 0202).

9. A method of mapping status messages of monitored objects to service elements in an IT-infrastructure-management system, the service elements and their dependencies being represented by an element graph having directed links between service elements, thereby defining higher-level and lower-level service elements (figs. 1 and 2; see item 400 relating to the IT mobile telecommunications infrastructure; par. 0145; 0202), the method comprising: analyzing a status message of a monitored object, and adding attributes to the status message related to information contained in the status message (par. 0040);

directing the status message to at least one higher-level service element; ascertaining, at the higher-level service element, on the basis of at least one of the attributes, whether the status message pertains to a lower-level service element connected with the higher-level service element (the modules of par. 0036, the operational data contain low level service elements with characteristics related to the high service elements or operational data);

downwardly propagating of the status message to said lower-level service element in response to a positive outcome in said ascertaining (par. 0074).

10. The method of claim 9, wherein at least some of the service elements are logical service elements (par. 0040).

11. The method of claim 9, wherein an edge condition is associated with a link connecting the at least one higher-level service element with a lower-level service

element, and wherein, in said ascertaining, it is tested, using at least one of the attributes, whether the edge condition is fulfilled (see fig. 1).

12. The method of claim 9, wherein a node condition is associated with the at least one higher-level service element, and wherein, in said ascertaining, it is tested, using at least one of the attributes, whether the node condition is fulfilled ascertaining (par. 0039).

13. The method of claim 9, wherein lower-level service elements are arranged in more than one hierarchical level, and wherein the actions of ascertaining and downwardly propagating are repeatedly carried out downwardly from level to level.

14. The method of claim 13, wherein, in said ascertaining, for a service element on a higher hierarchical-level, at least one condition is tested for each service element on a lower hierarchical-level connected with the service element on the higher hierarchical-level, and wherein the downward propagation of the status message is terminated if no condition for propagating the status message to a service element on the lower hierarchical-level is fulfilled (fig. 3, par. 0039).

15. The method of claim 9, wherein the element graph is able to be extended by adding further service elements without a necessity to adapt the status messages of the monitored objects to the service elements added (par. 0145; 0202).

16. An IT-infrastructure-management server arranged to map status messages of



monitored objects of the IT infrastructure to service elements which are represented in the server in an element graph having directed links connecting service elements, thereby defining higher-level and lower-level service elements (figs. 1 and 2; see item 400 relating to the IT mobile telecommunications infrastructure, and system server 150; par. 0145; 0202), the server being programmed to: direct a status message to at least one higher-level service element; ascertain, at the higher-level service element, whether the status message pertains to a lower-level service element connected with the higher-level service element (the modules of par. 0036, the operational data contain low level service elements with characteristics related to the high service elements or operational data); propagate downwardly the status message to said lower-level service element in response to a positive outcome in said ascertaining (par. 0074).

17. An IT-infrastructure-management server arranged to map status messages of monitored objects of the IT infrastructure to service elements which are represented in the server in an element graph having directed links connecting service elements, thereby defining higher-level and lower-level service elements (figs. 1 and 2; see item 400 relating to the IT mobile telecommunications infrastructure, and system server 150; par. 0145; 0202), the server being programmed to: analyze a status message of a monitored object, and add attributes to the status message related to information contained in the status message, direct the status message to at least one higher-level service element; ascertain, at the higher-level service element, on the basis of at least one of the attributes, whether the status message pertains to a lower-level service

element connected with the higher-level service element (the modules of par. 0036, the operational data contain low level service elements with characteristics related to the high service elements or operational data); propagate downwardly the status message to said lower-level service element in response to a positive outcome in said ascertaining (par. 0074).

18. A computer program product comprising a machine-readable medium with program code stored on it, for carrying out a method, when executed on a computer system, of mapping status messages of monitored objects to service elements in an IT-infrastructure-management system, the service elements and their dependencies being represented by an element graph having directed links between service elements, thereby defining higher-level and lower-level service elements (figs. 1 and 2; see item 400 relating to the IT mobile telecommunications infrastructure, and system server 150; par. 0145; 0202), the program code being arranged to: direct a status message to at least one higher-level service element; ascertain, at the higher-level service element, whether the status message pertains to a lower-level service element connected with the higher-level service element (the modules of par. 0036, the operational data contain low level service elements with characteristics related to the high service elements or operational data); downwardly propagating the status message to said lower-level service element in response to a positive outcome in said ascertaining (par. 0074).

19. A computer program product comprising a machine-readable medium with program

code stored on it, for carrying out a method, when executed on a computer system, of mapping status messages of monitored objects to service elements in an IT-infrastructure-management system, the service elements and their dependencies being represented by an element graph having directed links between service elements, thereby defining higher-level and lower-level service elements (figs. 1 and 2; see item 400 relating to the IT mobile telecommunications infrastructure, and system server 150; par. 0145; 0202), the program code being arranged to: analyze a status message of a monitored object, and add attributes to the status message related to information contained in the status message, direct the status message to at least one higher-level service element; ascertain, at the higher-level service element, on the basis of at least one of the attributes, whether the status message pertains to a lower-level service element connected with the higher-level service element (the modules of par. 0036, the operational data contain low level service elements with characteristics related to the high service elements or operational data); propagate downwardly the status message to said lower-level service element in response to a positive outcome in said ascertaining (par. 0074).

20. A propagated signal carried on an electromagnetic waveform comprising a representation of program code for carrying out a method, when executed on a computer system, of mapping status messages of monitored objects to service elements in an IT-infrastructure-management system, the service elements and their dependencies being represented by an element graph having directed links between

service elements, thereby defining higher-level and lower-level service elements (figs. 1 and 2; see item 400 relating to the IT mobile telecommunications infrastructure, and system server 150; par. 0145; 0202), the program code being arranged to: direct a status message to at least one higher-level service element; ascertain, at the higher-level service element, whether the status message pertains to a lower-level service element connected with the higher-level service elements (the modules of par. 0036, the operational data contain low level service elements with characteristics related to the high service elements or operational data); downwardly propagating the status message to said lower-level service element in response to a positive outcome in said ascertaining (par. 0074).

21. A propagated signal carried on an electromagnetic waveform comprising a representation of program code for carrying out a method, when executed on a computer system, of mapping status messages of monitored objects to service elements in an IT-infrastructure-management system, the service elements and their dependencies being represented by an element graph having directed links between service elements, thereby defining higher-level and lower-level service elements (figs. 1 and 2; see item 400 relating to the IT mobile telecommunications infrastructure, and system server 150; par. 0145; 0202), the program code being arranged to: analyze a status message of a monitored object, and add attributes to the status message related to information contained in the status message, direct the status message to at least one higher-level service element(the modules of par. 0036, the operational data contain low level service elements with characteristics related to the high service elements or

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operational data); ascertain, at the higher-level service element, on the basis of at least one of the attributes, whether the status message pertains to a lower-level service element connected with the higher-level service element; propagate downwardly the status message to said lower-level service element in response to a positive outcome in said ascertaining (par. 0074).

### ***Conclusion***

6. ***This action is made Non-Final.*** Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3301.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0800.

/Jude J Jean-Gilles/

Primary Examiner, Art Unit 2143

April 27, 2008